



Complete Summary

TITLE

Pneumococcal pneumonia: percent of applicable patients receiving pneumococcal immunization (spinal cord injury & disorder [SCI&D] cohort).

SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

Brief Abstract

DESCRIPTION

This measure assesses the percent of eligible patients receiving pneumococcal immunizations.

RATIONALE

Pneumococcal infection causes an estimated 40,000 deaths annually in the United States, accounting for more deaths than any other vaccine-preventable bacterial disease. Approximately half of these deaths potentially could be prevented through the use of vaccine. Case-fatality rates are highest for meningitis and bacteremia, and the highest mortality occurs among the elderly and patients who have underlying medical conditions. Among children, death from pneumococcal infection is relatively uncommon, except among those who a) have meningitis, b) are immunocompromised, or c) have undergone splenectomy and have severe bacteremia. Despite appropriate antimicrobial therapy and intensive medical care, the overall case-fatality rate for pneumococcal bacteremia is 15% to 20% among adults. Among elderly patients, this rate is approximately 30% to 40%. An overall case-fatality rate of 36% was recently documented for adult inner-city residents who were hospitalized for pneumococcal bacteremia.

Children aged less than 2 years and adults aged greater than or equal to 65 years are at increased risk for pneumococcal infection. Persons who have certain underlying medical conditions also are at increased risk for developing pneumococcal infection or experiencing severe disease and complications. Adults at increased risk include those who are generally immunocompetent but who have chronic cardiovascular diseases (e.g., congestive heart failure or cardiomyopathy), chronic pulmonary diseases (e.g., chronic obstructive pulmonary disease [COPD] or emphysema), or chronic liver diseases (e.g., cirrhosis). Diabetes mellitus often is associated with cardiovascular or renal dysfunction, which increases the risk for

severe pneumococcal illness. The incidence of pneumococcal infection is increased for persons who have liver disease as a result of alcohol abuse. Asthma has not been associated with an increased risk for pneumococcal disease, unless it occurs with chronic bronchitis, emphysema, or long-term use of systemic corticosteroids.

Respiratory impairments are the leading cause of death and leading causes of morbidity in the spinal cord injury and disorder (SCI&D) population. Except for the most caudal levels of injury (or very incomplete injuries), respiratory muscles are weak, cough is less effective, and there are autonomic changes as well that lead to a much higher incidence of respiratory diseases in this population. Pneumococcal vaccinations reduce risk of respiratory complications and death. Vaccination rates in the Veterans Administration (VA) SCI&D population are low. Thus, the primary objective of this preventive care measure is to increase vaccination rates for pneumococcal pneumonia in the VA SCI&D population.

PRIMARY CLINICAL COMPONENT

Pneumococcal disease; pneumococcal immunization

DENOMINATOR DESCRIPTION

Eligible patients from the Spinal Cord Injury & Disorder (SCI&D) cohort sampled (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

The number of patients from the denominator receiving pneumococcal immunizations (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

PRIMARY MEASURE DOMAIN

Process

SECONDARY MEASURE DOMAIN

Not applicable

EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Use of this measure to improve performance
Wide variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

External oversight/Veterans Health Administration
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than 64 years (or younger if clinically indicated [see "Denominator Inclusions/Exclusions" field])

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

See "Rationale" field.

BURDEN OF ILLNESS

See "Rationale" field.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Eligible patients from the Spinal Cord Injury & Disorder (SCI&D) cohort*

*Refer to the original measure documentation for patient cohort description.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR (INDEX) EVENT

Encounter

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Eligible patients from the Spinal Cord Injury & Disorder (SCI&D) cohort sampled*

*Eligible Patients: Meets Spinal Cord & Injury Disorder (SCI&D) cohort selection criteria**

**Refer to original measure documentation for patient cohort description and sampling size strategy.

Exclusions

Exclude patients that have any one of the following:

- Documented diagnosis of cancer of the esophagus, liver, or pancreas
- Enrolled in a Veterans Health Administration (VHA) or community-based hospice program
- Documented in the medical record a life expectancy less than 6 months

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The number of patients from the denominator receiving pneumococcal immunizations (i.e., documented given once)

Exclusions

Refusals are counted in the denominator, but not the numerator (count against the facility).

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR TIME WINDOW

Episode of care

DATA SOURCE

Administrative and medical records data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Fiscal Year (FY) 2005 targets for pneumococcal immunization (Spinal Cord Injury & Disorder [SCI&D] cohort):

- Facility Floor: 70%
- Meets Target: 85%
- Exceeds Target: 87%

EVIDENCE FOR PRESCRIPTIVE STANDARD

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Immunizations - pneumococcal.

MEASURE COLLECTION

[Fiscal Year \(FY\) 2005: Veterans Health Administration \(VHA\) Performance Measurement System](#)

MEASURE SET NAME

[Infectious](#)

MEASURE SUBSET NAME

[Immunizations](#)

DEVELOPER

Veterans Health Administration

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2001 Nov

REVISION DATE

2005 Mar

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Office of Quality and Performance (10Q). FY2002 VHA performance measurement system. Technical Manual. Immunizations - pneumococcal (spinal cord injury and disorders cohort). Washington (DC): Veterans Health Administration (VHA); 2002 Mar 8.

SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

MEASURE AVAILABILITY

The individual measure, "Immunizations - Pneumococcal," is published in "FY 2005 VHA Performance Measurement System: Technical Manual."

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NQMC STATUS

This NQMC summary was completed by ECRI on September 27, 2002. The information was verified by the Veterans Health Administration on October 29, 2002. This NQMC summary was updated by ECRI on November 9, 2004. The information was verified by the measure developer on December 10, 2004.

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